

SPX Communication Technology division, SPX Corporation

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Improving Communication Services for)	WTB Docket No. 11-40
Native Nations by Promoting Greater)	
Utilization of Spectrum Over Tribal Lands)	
)	

Late-Filed Comments of the
SPX Communication Technology division
SPX Corporation

The following comments are submitted by the SPX Communication Technology (f/k/a Dielectric Communications) division of SPX Corporation (SPX). SPX is pleased to offer to the Federal Communications Commission (“Commission”) its insight on this very important national goal.

SPX or its predecessors have been furnishing RF products to the broadcasting industry for over 60 years. SPX has supplied the majority of TV broadcast transmitting antennas for the U.S. DTV transition. SPX is also on the leading edge of high power RF Filter design technologies involving the ATSC standard and adjacent TV channel combining, for which it received a Technology and Engineering Emmy Award in 2007. SPX has now applied that broadcast expertise toward the development of an innovative telecommunications technology geared to rural markets. We have described this technology in previous comments to the Commission regarding Rural Broadband Deployment¹ and Public Safety². SPX provides these references as comments to the present

¹ See SPX Comments on GN Docket No. 11-16, *Preparation for Update to Rural Broadband Report*, submitted March 2, 2011

² See SPX Comments on PS Docket No 06-229, *Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, submitted April 6, 2011

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proceeding regarding Spectrum Use over Tribal Lands as this technology also offers the potential for a faster and more economical implementation of communication and broadband networks in these areas.

Overview of Key Issues

- 1) Deploying networks for rural coverage presents major cost challenges.
- 2) A network that significantly reduces the number of base station sites while maintaining required reliability and quality of service can drive down costs while reducing deployment time.
- 3) Deployment of fewer base station sites requires expanded coverage from each site.
- 4) Expanded coverage requires positioning transmitting antenna systems at higher elevations and operating at increased effective radiated powers.
- 5) The technology for these antenna systems exists today. However, some changes to the Commission's rules are necessary to apply that technology.
- 6) By focusing the use of this technology in areas that are presently unserved or underserved by other wireless communications, the implementation of changes to the rules as described in Item 4 above can be less complicated than in areas where there are already numerous incumbent wireless operations.

Coverage Implications

Relying on existing technology and regulations, meeting coverage and performance objectives in rural areas of America creates a difficult challenge. These areas tend to be unserved or underserved by wireless applications due to the cost of building and maintaining base stations and the difficulty in obtaining satisfactory commercial returns on investments (ROI). Paragraph 15 of the NPRM for WT Docket No. 11-40, released March 3, 2011 states "The record provides evidence that

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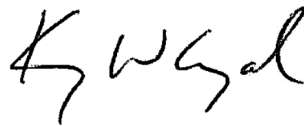
funding is a critical problem for deployment of infrastructure on Tribal lands where often there is no private sector business case for such deployment.” These comments are intended to respond specifically and positively to that question.

Conclusion

In addition to our previous comment filings, SPX has discussed this technique and its versatility over the past several months with several Commission technical staff members in different bureaus and offices.

We thank the Commission for this opportunity to comment and its consideration of this new technology for use in bringing wireless communication technologies to rural, underserved and unserved areas of the United States. We stand ready to answer any questions and to provide additional information that would be of assistance to the Commission in its deliberations.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "K Cozad", is positioned above the typed name and title.

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